CAMBRIDGE September 20, 2010—The Business Cycle Dating Committee of the National Bureau of Economic Research met yesterday by conference call. At its meeting, the committee determined that a trough in business activity occurred in the U.S. economy in June 2009. The trough marks the end of the recession that began in December 2007 and the beginning of an expansion. The recession lasted 18 months, which makes it the longest of any recession since World War II. Previously the longest postwar recessions were those of 1973-75 and 1981-82, both of which lasted 16 months.

In determining that a trough occurred in June 2009, the committee did not conclude that economic conditions since that month have been favorable or that the economy has returned to operating at normal capacity. Rather, the committee determined only that the recession ended and a recovery began in that month. A recession is a period of falling economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales. The trough marks the end of the declining phase and the start of the rising phase of the business cycle. Economic activity is typically below normal in the early stages of an expansion, and it sometimes remains so well into the expansion.

The committee decided that any future downturn of the economy would be a new recession and not a continuation of the recession that began in December 2007. The basis for this decision was the length and strength of the recovery to date.

The committee waited to make its decision until revisions in the National Income and Product Accounts, released on July 30 and August 27, 2010, clarified the 2009 time path of the two broadest measures of economic activity, real Gross Domestic Product (real GDP) and real Gross Domestic Income (real GDI). The committee noted that in the most recent data, for the second quarter of 2010, the average of real GDP and real GDI was 3.1 percent above its low in the second quarter of 2009 but remained 1.3 percent below the previous peak which was reached in the fourth quarter of 2007.

Identifying the date of the trough involved weighing the behavior of various indicators of economic activity. The estimates of real GDP and GDI issued by the Bureau of Economic Analysis of the U.S. Department of Commerce are only available quarterly. Further, macroeconomic indicators are subject to substantial revisions and measurement error. For these reasons, the committee refers to a variety of monthly indicators to choose the months of peaks and troughs. It places particular emphasis on measures that refer to the total economy rather than to particular sectors. These include a measure of monthly GDP that has been developed by the private forecasting firm Macroeconomic Advisers, measures of monthly GDP and GDI that have been developed by two members of the committee in independent research (James Stock and Mark Watson, available here), real personal income excluding transfers, the payroll and household measures of total employment, and aggregate hours of work in the total economy. The committee places less emphasis on monthly data series for industrial production and manufacturing-trade sales, because these refer to particular sectors of the economy. Movements in these series can provide useful additional information when the broader measures are ambiguous about the date of the monthly peak or trough. There is no fixed rule about what weights the committee assigns to the various indicators, or about what other measures contribute information to the process.

The committee concluded that the behavior of the quarterly series for real GDP and GDI indicates that the trough occurred in mid-2009. Real GDP reached its low point in the second quarter of 2009, while the value of real GDI was essentially identical in the second and third quarters of 2009. The average of real GDP and real GDI reached its low point in the second quarter of 2009. The committee concluded that strong growth in both real GDP and real GDI in the fourth quarter of 2009 ruled out the possibility that the trough occurred later than the third quarter.

The committee designated June as the month of the trough based on several monthly indicators. The

trough dates for these indicators are:

Macroeconomic Advisers' monthly GDP (June)
The Stock-Watson index of monthly GDP (June)
Their index of monthly GDI (July)
An average of their two indexes of monthly GDP and GDI (June)
Real manufacturing and trade sales (June)
Index of Industrial Production (June)
Real personal income less transfers (October)
Aggregate hours of work in the total economy (October)
Payroll survey employment (December)
Household survey employment (December)

The committee concluded that the choice of June 2009 as the trough month for economic activity was consistent with the later trough months in the labor-market indicators—aggregate hours and employment—for two reasons. First, the strong growth of quarterly real GDP and real GDI in the fourth quarter was inconsistent with designating any month in the fourth quarter as the trough month. The committee believes that these quarterly measures of the real volume of output across the entire economy are the most reliable measures of economic activity. Second, in previous business cycles, aggregate hours and employment have frequently reached their troughs later than the NBER's trough date. In particular, in 2001-03, the trough in payroll employment occurred 21 months after the NBER trough date. In 2009, the NBER trough date is 6 months before the trough in payroll employment. In both the 2001-03 and 2009 cycles, household employment also reached its trough later than the NBER trough date.

The committee noted the contrast between the June trough date for the majority of the monthly indicators and the October trough date for real personal income less transfers. There were two reasons for selecting the earlier date. The first was described above -- the fact that quarterly real GDP and GDI rose strongly in the fourth quarter. The second was that real GDI is a more comprehensive measure of income than real personal income less transfers, as it includes additional sources of income such as undistributed corporate profits. The committee's use of income-side measures, notably real GDI, is based on the accounting principle that the value of output equals the sum of the incomes that arise from producing the output. Apart from a random statistical discrepancy, real GDI satisfies that equality while real personal income does not.

The committee also maintains a quarterly chronology of business cycle peak and trough dates. The committee determined that the trough occurred in the second quarter of 2009, when the average of quarterly real GDP and GDI reached its low point.

For more information, see the FAQs and the more detailed description of the NBER's business cycle dating procedure at http://www.nber.org/cycles/recessions.html. An Excel spreadsheet containing the data and the figures for the indicators of economic activity considered by the committee is available at that page as well.

The current members of the Business Cycle Dating Committee are: Robert Hall, Stanford University (chair); Martin Feldstein, Harvard University; Jeffrey Frankel, Harvard University; Robert Gordon, Northwestern University; James Poterba, MIT and NBER President; James Stock, Harvard University; and Mark Watson, Princeton University. David Romer, University of California, Berkeley, is on leave from the committee and did not participate in its deliberations.

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(September 20, 2010)